



ANALYSIS OF MEXICAN JUDICIAL REFORM SENTIMENT

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BACKGROUND

- The judicial reform in Mexico aims to create a more efficient and professional judicial system.
- It seeks to address issues like corruption, nepotism, and improve access to justice.

The reform has generated mixed reactions, with some viewing it as a necessary step towards democratization, while others see it as a threat to the rule of law.



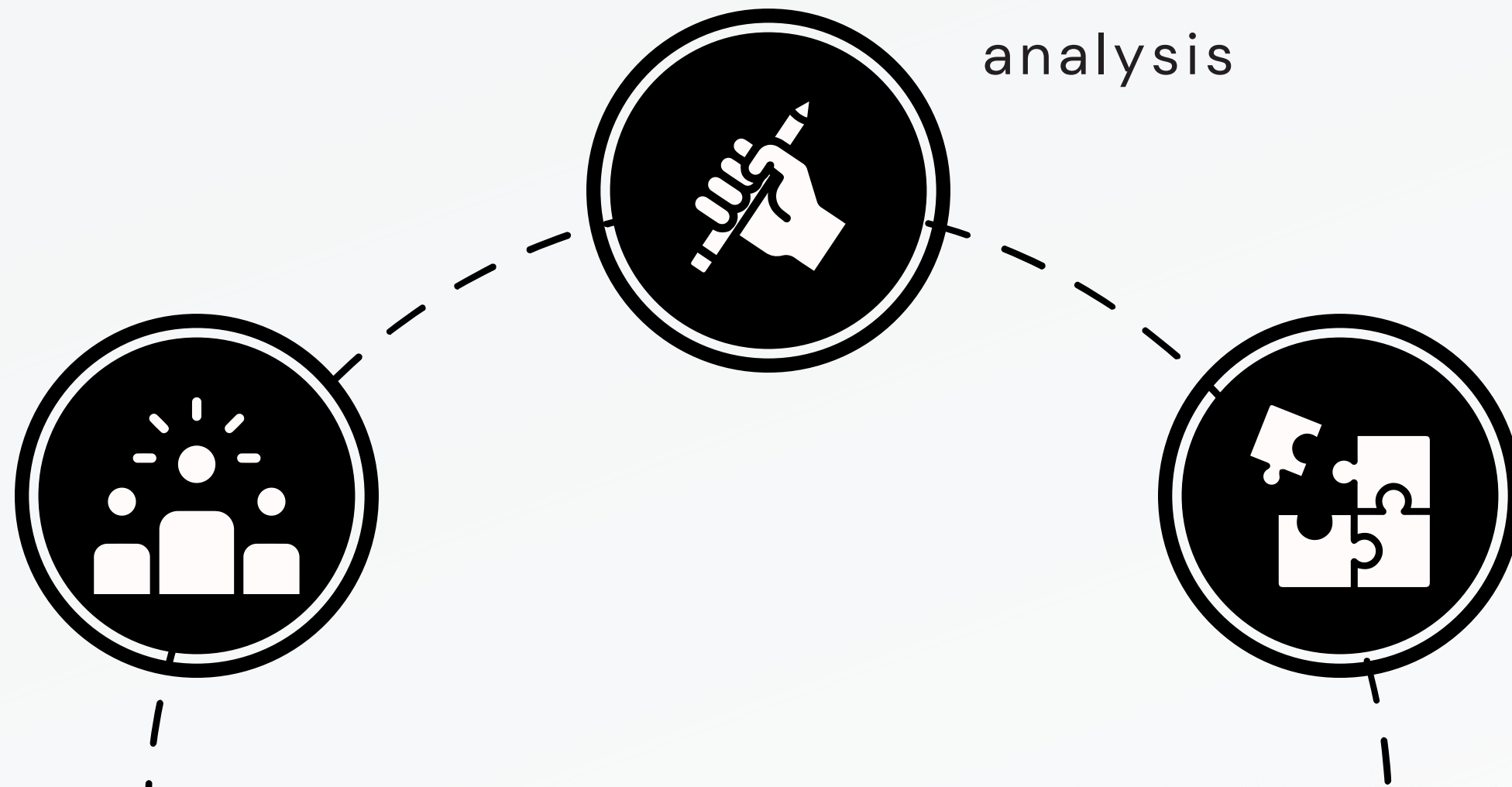
APPROACH

Data Collection

- Google News Scraping
- API: NewsAPI

Sentiment Analysis

- Implemented a Multinomial Naive Bayes
- TextBlob for initial sentiment analysis



CODE

	date	media	title	desc	
0	3 hours ago	Bloomberg	Legislaturas estatales de México respaldan ref...	Más de la mitad de las legislaturas estatales ...	https://www.bloom
1	4 hours ago	The New York Times	México está dividido frente al nuevo plan para...	Mientras una amplia propuesta para elegir casi...	https://www.nytimes.c
4	1 day ago	Bloomberg	Inversores advierten sobre retroceso a 1970 po...	En los últimos seis años, los inversionistas s...	https://www.bloom

	precision	recall	f1-score	support
Negative	0.00	0.00	0.00	1
Neutral	0.75	0.91	0.82	23
Positive	0.86	0.72	0.78	25
accuracy			0.80	49
macro avg	0.54	0.54	0.54	49
weighted avg	0.79	0.80	0.79	49

```
#import libraries
from GoogleNews import GoogleNews
from newspaper import Article
import pandas as pd
import time
import random
from datetime import datetime, timedelta
from textblob import TextBlob
import requests
from bs4 import BeautifulSoup
import matplotlib.pyplot as plt
```

```
from sklearn.feature_extraction.text import CountVectorizer
from sklearn.naive_bayes import MultinomialNB
from sklearn.model_selection import train_test_split
from sklearn.metrics import classification_report
import matplotlib.pyplot as plt
```

```
WARNING:newspaper.network:get_html_status(): bad status code 429 on URL: https://www.youtube.com/watch%3Fv%3DSr9Z0zlxrbw, html: <!DOCTYPE html
PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head><meta http-equiv="content-type" content="text/html; charset=utf-8"><meta name="viewport" content="initial-scale=1"><title>h
```



LEARNINGS

- First time experience with data scraping.
- New techniques: using newspaper and googlenews libraries for scraping articles.

CHALLENGES

- IP blocking.
- Data imbalance: particularly with negative sentiment articles.
- Dynamic content.
- Error handling during scrapping.
- Model performance.

FUTURE IMPROVEMENTS

Download more
articles to achieve
a more balanced
dataset



Use Selenium to
scrape articles
from opposition
newspapers that
may not appear
in Google News



Experiment with
different machine
learning models



Implement NLP
methods to
enhance the
analysis of
sentiments

**THANKS FOR
THE COURSE**

:)

